

APPENDIX A: FUNCTIONAL ANALYSIS/PROCESS IMPROVEMENTS

The Functional Analysis (FA) process improvement technique offers a means for cooperative discussion and problem solving among various parts of an organization. It makes possible the resolution of information problems for the best interests of an entire organizational unit.

Some of the FA principles may be helpful during the Business Unit Analysis (BUA) process. The value of FA to the BUA process is that it is a simple methodology that seeks to optimize, improve, and simplify the work performed by functions within an organization. This optimization can lead to improved quality of services by the installation, improved timeliness of those services to customers, and reduced O&M costs for those services.

FA uses the concept of three key measures of performance (metrics): Quality, timeliness, and cost per unit. This simplified categorization of performance measures makes FA easy to implement at any level of an organization. Typically, one metric for each of these three areas for each function or sub-function is enough to track performance of that function or sub-function.

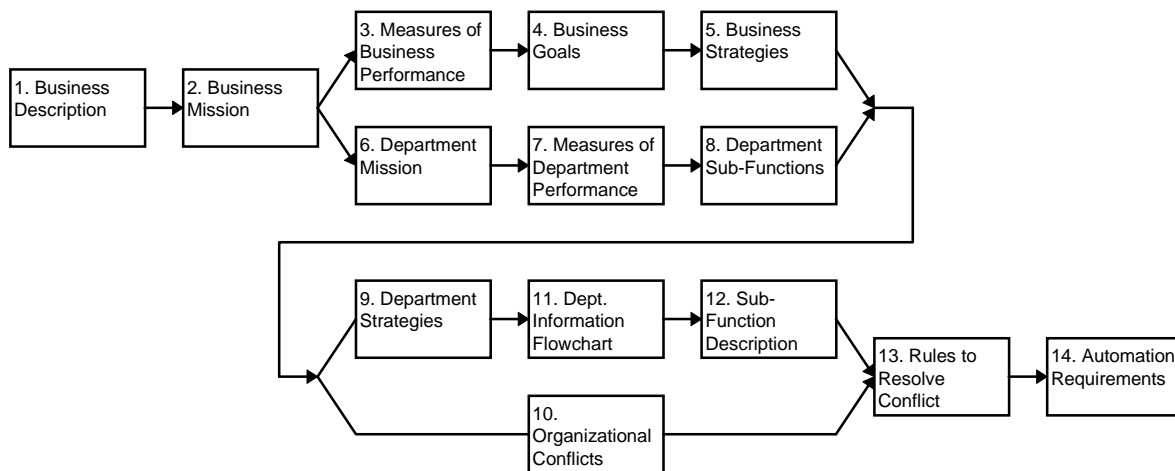
The purpose of FA is to make an improvement in the day-to-day operation of an organization. It is a way of re-thinking the rules by which the business runs. The rules of operation are the heart of the system by which the organization runs. A system is the way in which people pass information to one another. The rules by which it operates determine the timing and quality of that information. Some of the rules are built into the information systems of the business, but they are also built into the daily procedures for work. These results might or might not be documented. Usually they are not.

A key benefit of this technique is that FA can be applied at any level of an organization as well as it would for a business as a whole. This is an advantage over some other analysis techniques that must start the process at the executive level. The analysis of business units, their functions and performance can all be evaluated using the functional analysis practice regardless of the organizational level—installation-wide, core business unit, function or sub-function. In fact, the FA methodology uses much of the same terminology as that defined in the IMAP and in this guide. Furthermore, FA is function-oriented, not organization-oriented. That is: FA evaluates the performance of specific functions that generate products within an organization whether or not those functions are organized within a specific “branch” or other organizational structure. This is also true for the IMAP cost accounting installation core business model described in this guide.

Another benefit of the FA technique for business unit development is its definition of work units. In FA, the term “business” is used generically to define any endeavor where the use of resources produces a product delivered to a customer (be it material, information, or a service). FA identifies the functional structure of a “business” and the “business units” in hierarchical rank:

- Core Business,
 - Departments,
 - Sub-Functions.

Exhibit A-1. Flow Diagram of a Functional Analysis Study Approach



FA consists of a series of modest, logical steps. These steps lead from corporate strategies to operating procedures, to information systems, and—where appropriate—to the use of computers and automation. Many of the recommended steps described in the guide follow the functional analysis study approach.

The lowest element of a work process under FA is a sub-function.

Attachment 1 to this Appendix includes a bibliography on Functional Analysis for purposes of further reading on the subject, if desired

APPENDIX A, ATTACHMENT 1: FUNCTIONAL ANALYSIS/PROCESS IMPROVEMENTS—SELECTED BIBLIOGRAPHY

- **Functional Analysis : Simplify Before Automating, Eugene J. Wittry / Published 1991**

Abstract: [This book] “provides all of the keys to analyzing the flow of materials, information, and services within a business, and then shows you how to simplify operations for maximum efficiency. You’re shown how to use Functional Analysis to assess the performance and strategies of your business [...] Techniques of representation, analytic methods, and causes and cures for common errors in all applications are fully covered. [...] Step by step instructions in the chapters demonstrate how to use FA to establish goals and objectives, determine the organizational impacts of new automation, set up implementation teams, document results, and obtain maximum involvement from staff members.”

- **The 20% Solution : Using Rapid Redesign to Create Tomorrow's Organizations Today. John J. Cotter / Hardcover / Published 1995**

Abstract: “... the key to getting a jump on change and beating out the competition in today's tumultuous, hyper-competitive business jungle is Rapid Redesign. A dynamic new approach to formulating and implementing strategic change, Rapid Redesign is based on the ongoing, systematic assessment of "the 20% of what you do that will contribute most to your success in the future," and then doing less to accomplish more by concentrating your time and energies on that 20%. [...] provides step-by-step guidelines on how to go about designing, planning, building, and managing such an organization. You'll learn how to identify and prioritize key strengths and weaknesses in your organization's structure, work routines, and personnel in the context of tomorrow's opportunities. You'll discover hundreds of innovative new approaches to improving productivity - such as horizontal business teams and internal and external alliances [...] You'll also learn how to reshape your organization in the three key areas of structure, support, and staffing, and how to build mechanisms for continuous reflection and renewal into the new organizational structure.”

- **The Improvement Guide : A Practical Approach to Enhancing Organizational Performance (Jossey-Bass Business and Management Series). Gerald J. Langley (Editor), et al / Hardcover / Published 1996**

Abstract: “The Improvement Guide offers a fundamental approach that promotes integrated activities designed to eliminate quality problems, reengineer systems to reduce costs, and create new products and services to increase demand. Unlike

Source of Abstracts: WWW search, no endorsement is intended.

other books that focus on such tools as flowcharts and cause-and-effect diagrams, this book demonstrates how to make change happen. [...] Drawing from experience over the last fifteen years in such diverse settings as manufacturing, construction, healthcare, law, government, education, and the nonprofit sector, the authors provide an innovative blend of practical ideas, examples, and applications for improvement. To make the change process even easier, the authors have compiled a Resource Guide to Change Concepts containing a rich collection of ideas for improvement and examples of how they can be applied. It catalogues a variety of change concepts - such as smoothing the flow of work, scheduling into multiple processes rather than one, and building in consequences to foster accountability - and presents real-life examples of each, enabling even beginners to utilize the tested techniques of some of the world's most experienced improvement practitioners."

- **Business Process Change : Concepts, Methods and Technologies.**
Varun Grover, William J. Kettinger / Hardcover / Published 1995

Abstract: "A refereed volume about the evolution of Business Process Reengineering (BPR), a means to restructure aging bureaucratized processes to achieve the strategic objectives of increased efficiency, reduced costs, improved quality, and greater customer satisfaction. The 25 contributed chapters represent both North American and European viewpoints, private and public sector perspectives, academic, consultant and managerial frames of reference, and material is presented using case studies, empirical studies, conceptual frameworks, and tutorials." Annotation c. by Book News, Inc., Portland, Or.

- **The Change Management Handbook : A Road Map to Corporate Transformation.** **Lance A. Berger, et al / Hardcover / Published 1993**

Abstract: "A practical, action-oriented guide for change agents and managers, showing how to develop the type of flexible organization that achieves long-term success. It lists specific actions to be taken by senior business managers, the people they assign to implement change policies on the line, and the professional advisors they enlist to assist and monitor the change processes. A change map is provided that assembles and integrates all the pieces needed to ensure that an organization remains effective and flexible." Annotation c. Book News, Inc. Portland, Or.

- **Battling the Barriers to Success : 50 Ways to Keep Your Workplace Improvement Initiative on Target.**
Joan P. Klubnik, Marlene Roschelle / Hardcover / Published 1996

Abstract: "Designed to be a quick reference to identify and categorize the issues and problems administrators and employees face in workplace improvement efforts." Annotation c. by Book News, Inc., Portland, Or.

- **Seamless Government : A Practical Guide to Re-Engineering in the Public Sector (The Jossey-Bass Public Administration).**
Russell M. Linden / Hardcover / Published 1994

Abstract: From the table of Contents— “2. The Evolution of Work in Public and Private Bureaucracies; 3. A New Approach to Work: Re-Engineering and the Seamless Organization; 7. Overcoming Public Sector Constraints; 8. Aligning Systems to Support Seamless Work; 9. Re-Engineering Lessons from Two Agencies...”

- **Our Emperors Have No Clothes : Incredibly Stupid Things Corporate Executives Have Done While Reengineering, Restructuring, Downsizing, Tqming, Team-Building [...]** Alan Weiss / Hardcover / Published 1995

Abstract: “Weiss has visited over 3,000 organizations in the course of his consulting business: he gives numerous examples of decisions and management problems at the highest levels, including a set of steps which outline how organizations can assure they are well-run, intelligent operations. Use these steps to self-assess any corporation and work towards renewal.” Midwest Book Review

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX B: ACTIVITY BASED COSTING (ABC)

While Functional Analysis (FA), discussed in Appendix A, seeks to define business functions and sub-functions to improve the day-to-day processes of work, ABC seeks to define “activities” within sub-functions to manage day-to-day accounting of those processes. In many cases, the break-down of business processes into sub-functions using FA, leads to those sub-functions being the same as the “activities” identified using ABC.

ABC focuses on the accurate and complete identification of costs of products and services of an organization. It identifies how resources are used, not merely what those resources are. ABC ties performance metrics to the cost of achieving that performance.

ABC is defined as a “methodology that measures the cost and performance of resources, activities, and cost objects.” It provides decision makers with accurate information on what existing processes actually cost. ABC provides a management tool for fact-based decision analysis.

ABC brings into an organization’s accounting process the ability to identify system strengths and weaknesses throughout the organization. It incorporates value analysis of business activities and therefore applies to business functions, business areas, and whole organizations.

A key difference between FA and ABC is that FA may stand alone and be performed as a fast, easy to understand “study” in discrete moments in time and hence does not require the information infrastructure overhaul typically associated with ABC. On the other hand, once an activity based costing practice is in place in an organization, its benefits are significant and long-lasting.

ABC is being implemented in many government operations. The IMAP process discussed in Appendix C currently being implemented within the Navy is one example.

Attachment 1 to this appendix provides a selected bibliography for further reading on the subject, if desired.

The lowest element of a work process under ABC is an activity.

APPENDIX B, ATTACHMENT 1: ACTIVITY BASED COSTING— SELECTED BIBLIOGRAPHY

- **Activity-Based Cost Management Making It Work : A Manager's Guide to Implementing and Sustaining an Effective ABC System.**
Gary Cokins / Hardcover / Published 1996

Abstract: “What good are the facts and figures of managerial accounting if the people who need them can't use them? More and more organizations are realizing that activity based costing is a superior method for both identifying improvement opportunities and measuring the realized benefits of performance initiatives. [...] ABC offers a superior product and service costing technique with substantially more realistic cost assignments and much greater accuracy. [...] It can even be used for performance measurements. ABC represents a significant change in corporate systems and can be challenging to implement. [This book] will walk you through the process so you can overcome barriers and successfully implement ABC.”

- **Implementing Activity-Based Management in Daily Operations (Nam/Wiley Series in Manufacturing). John A. Miller / Hardcover / Published 1995**

Abstract: “This applications-oriented guide offers a step-by-step approach to the revolutionary and popular accounting technique of Activity-Based Costing (ABC). By implementing this system, managers can track expenses and make more profitable business decisions. Describes connections between total quality management, business process reengineering and ABC. Features numerous examples illustrating the benefits of this system in cost management.”

- **Activity-Based Costing for Small and Mid-Sized Businesses; An Implementation Guide. Douglas Hicks / Paperback / Published 1997**

Abstract: “Provides a much-needed alternative to the “big guys” approach to activity-based costing (ABC). Divided into 3 sections, it begins by addressing some of the general issues regarding ABC at small and mid-sized companies, featuring key concepts needed to implement ABC. Part 2 outlines the steps necessary to establish an activity-based system including how to develop an effective cost flow pattern, the tools used in this procedure, a process for planning a cost model and an outline for gathering the data required to drive it. Finally it explains how the activity-based cost accumulation model, developed in the previous section, can be used to improve a company's decision-making process and demonstrates how a business can create cost estimates and evaluate pricing strategies for multi-year programs.”

Source of Abstracts: WWW search, no endorsement is intended.

APPENDIX C: INSTALLATION MANAGEMENT ACCOUNTING PROJECT

The Installation Management Accounting Project (IMAP), jointly chartered by the Assistant Secretary of the Navy (Financial Management and Comptroller) and the Deputy Chief of Naval Operations for Logistics, deployed a systematic way of capturing and reporting base operating costs within the Standard Accounting and Reporting System-Field Level (STARS-FL).

Elements of both FA and ABC can be found in the (IMAP). The IMAP is a good approximation of activity based costing using the existing cost accounting infrastructure as it is being implemented at each installation.

One key element of the IMAP valuable for business unit analysis is its use of the Installation Core Business Model (ICBM). This Core Business Model proposes a structured definition of Base Operating Support (BOS) functions (not necessarily the organizational structure) typical in any Navy installation.

The overarching benefit of using the IMAP in the business unit analysis process is that it breaks down all BOS cost account codes (CACs) in the existing accounting system into functional areas. This greatly simplifies the task of identifying costs (or “resources”) against sub-functions. In effect the CACs become the sub-functions under IMAP.

The lowest element of a work process under IMAP is a Cost Account Code (CAC).

IMAP does not yet implement a distribution of military manpower costs to the various functions within the model. Instead, it identifies “manpower” as a distinct function in itself. Likewise, it does not allocate maintenance and repair and other facility costs to end user sub-functions (e.g., utility cost for the Child Development Center). This guide introduces estimating techniques that may be used to allocate and distribute these costs to sub-functions on the installation.

Attachment 1 to this appendix contains the 23 May 97 memorandum and package deploying the IMAP initiative. This package contains more detailed information on the IMAP.

Assistant Secretary of the Navy (Financial Management and Comptroller)

Memorandum, 23 May 97,

Subject: Installation Management Accounting Project

APPENDIX D: PERFORMANCE BENCHMARKS—SELECTED BIBLIOGRAPHY

- **The American Productivity & Quality Center**
<http://www.apqc.org>
1-800-776-9676

“The American Productivity & Quality Center is in the business of improving your organization through education, training, benchmarking services, action research, networking opportunities, publications, and other media. We are primarily a member-based organization, but most of our products and services are available to nonmembers.”

- **Benchmarking for Best Practices in the Public Sector : Achieving Performance Breakthroughs in Federal, State, and Local Agencies.**
Patricia Keehley (Editor), et al / Hardcover / Published 1996

Abstract: “[This book] is a unique, practical guide that shows public officials and administrators at all levels of government how to identify best practices and implement them in their organizations. The authors go beyond abstract concepts to bring benchmarking to life with real cases from federal, state, and local governments. They show how benchmarking methods have been adapted to the unique needs of the public sector and describe the tangible benefits gained by public agencies that have applied these techniques. Offering step-by-step advice along with checklists, flowcharts, sample forms, **a resource directory**, and other tools to help managers take action quickly, the authors demonstrate what benchmarking is and how it differs in the public sector, six criteria for selecting a program or process to be benchmarked, ways to generate support and ideas for a benchmarking project, how to select and work with a benchmarking partner, and how to plan a strategy for using the project's findings.”